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REMARKS

Claims 1-22 are pending. Claims 1-3 and 6-22 are rejected. Claims 23-26 have been added. Claims 1-26 remain in the case. Reconsideration in light of the following comments is requested.

Claims 1-22 are rejected under Section 112, first paragraph. The examiner takes the position that the specification does not enable the injection molding of substrates other than disk substrates. He urges that "shapes other than a disk present problems of injection molding of a disk with the desired surface roughness and flatness which are not addressed in the specification and which could not be determined except by an undue burden of experimentation by one of ordinary skill in the art."

In order to make a rejection for lack of enablement, the examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention. *In re Wright*, 999 E2d 1557, 1562, 27 USPQ2CI 1510, 1513 (Fed. Cir. 1993) (examiner must provide a reasonable explanation as to why the scope of protection provided by a claim is not adequately enabled by the disclosure). MPEP 2164.04. In the present case, the examiner has not met his burden of establishing a basis for questioning enablement. The examiner has provided no reason why the problems inherent in injection molding are greater for substrates that are not disk-shaped. The examiner merely makes a bald statement that "shapes other than a disk present problems of injection molding." No reasoning is provided, nor any evidence offered in support of this statement. As stated by the court, "it is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain *why* it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement. Otherwise, there would be no need for the applicant to go to the trouble and expense of supporting his presumptively accurate disclosure." *In re Marzocchi*, 439 F.2d 220, 224, 169 USPQ 367, 370 (CCPA 1971).

Furthermore, applicants describe a resin that provides improved flatness and roughness for all injection molded shapes, as well as improved straightness and waviness, as compared with the magnetic recording medium substrates obtained by injection molding a commercially sold

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thermoplastic resin describes the problems associated with injection molding. See Table 2 and paragraph 0082. Reconsideration and withdrawal of this basis for rejection is respectfully requested.

The examiner also urges that "in order to obtain the benefits of the invention (Tg and thermal stability required) specific structure polymers with specific cyclization rates are required which are not present in the independent claims," citing paragraphs 0026-0029 of applicants' specification. Applicants have amended claims 1 and 3 to recite the cyclization rate, but a recitation of Tg in these claims is not warranted. The portion of the specification cited by the examiner states that "the glass transition temperature (Tg) is preferably in [a range of 180°C to 270°C]." While that range, and the even more preferred range of 200°C to 270°C give the best results, values outside these ranges also will provide satisfactory injection molded products. Moreover, since Tg is dependent on the cyclization rate, recitation of cyclization rate in claims 1 and 3 is sufficient. ("To obtain a glass transition temperature (Tg) and thermal stability suitable for a thermoplastic resin, the cyclization rate of the thermoplastic allyloxymethylstyrene type resin obtained must be at least 80%. Specifically, in the case of a thermoplastic phenylallyloxymethylstyrene resin, the cyclization rate must be at least 90%, preferably at least 99%. Moreover, in the case of a thermoplastic allyloxymethylstyrene resin, the cyclization rate must be at least 80%, preferably at least 88%"). Accordingly, reconsideration of this basis for rejection under Section 112, first paragraph, is respectfully requested.

Claims 1, 2, 4, 6, 6, 9-12, 14, 15, 17-19, and 20 are rejected under the second paragraph of Section 112 based on the term "type" in the claims. The claims have been amended appropriately.

Claims 1-22 are rejected under Section 103(a) as being unpatentable over the state of the art at the time of the invention "as admitted and shown by the references of record." In this regard the examiner cites paragraphs 0001-0012 of the specification and Hirata *et al.* (U.S. 6,333,089).

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The cited portion of the specification relates to the problems of plastic magnetic recording medium substrates. As noted in paragraph 0011, "plastic magnetic recording medium substrate can be formed with a polycarbonate resin, a polymethyl methacrylate resin or the like, and a thermoplastic norbornene type resin. However, polycarbonate resins and polymethyl methacrylate resins used for optical disk substrates deform through moisture absorption or heat, making it unsuitable. Moreover, although a thermoplastic norbornene type resin has relatively good properties with regard to heat resistance, hygroscopicity, and shape stability, such a resin again has problems described above." The present invention, on the other hand, uses thermoplastic allyloxymethylstyrene resins of specified structures, none of which are disclosed or suggested in the prior art for "an injection molding plastic magnetic recording medium substrate" as presently claimed. Whether or not resins having these structures were known is immaterial to the consideration of whether it would have been obvious to use them in an injection molded plastic magnetic recording medium substrate.

The examiner argues that it would have been obvious "to select a high Tg polymer with high thermal stability to address these problems such as was done by selecting polycarbonate or norbornene polymer." Yet the cited portion of the specification does not indicate that polycarbonate or norbornene polymers were selected because they are high Tg polymers with high thermal stability. Thus, the allegation that polycarbonate and norbornene were selected based on these properties is unsupported in the present record. Moreover, the examiner has identified no other teaching in the art that high Tg polymers with high thermal stability would address any of the problems of flatness, straightness, waviness and roughness in injection molded substrates, let alone all of these problems. That teaching is provided only by applicants.

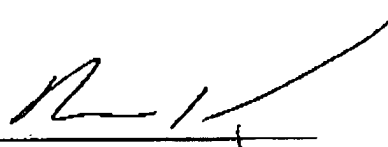
Furthermore, if high Tg and high thermal stability alone were responsible for improved results, then how to explain the improvement provided by Working Example 4 vis-à-vis Comparative Example 1? Comparative Example 1 has a *higher* Tg than Working Example 4, and a thermal decomposition point that differs by only 10 degrees. Yet Working Example 4 provides superior results to Comparative Example 1. Clearly, the present invention cannot be reduced to the existence of one or two result-effective variables, even were the examiner able to identify some teaching in this regard (which he has not). The improved results are the result of

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using polymers of specified structure in injection molded substrates. No *prima facie* case of obviousness exists.

Applicants note with appreciation the examiner's indication of allowable subject matter as recited in claims 4, 5 and 10. However, based on the foregoing, all of the product and method claims are deemed to be in *prima facie* condition for allowance. Reconsideration of the claims and withdrawal of the pending rejections is respectfully requested. Should there be any question regarding this application, the examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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